Visual Organs of Lamellibranchs.—Dr. Benjamin Sharp reported on his work on the lamellibranch eye. He had examined the edge of the mantle of Ostrea virginica and Mitilis edulis of the Asiphonata, and the siphons of Venus mercenaria, Mya arenaria, Mactra solidissima, besides the forms already described for Solen ensis and S. vagina (Proc. of Academy of Nat. Sciences of Phila., 1883, pp. 248-9). The pigmented cells found in these parts are essentially the same as those found in Solen ensis and S. The smallest of all the cells were found in Ostrea and the largest in Venus. Experiments on these forms show their sensitiveness to light and shadow, and the cells showing the retinal character described leaves little doubt as to the power of vision. No nerves could be demonstrated passing direct to these cells, and probably those distributed to the general epidermis serve in transmitting the impressions. The visual power is so low that nerves have not been yet specialized for this purpose.

JANUARY 15.

The President, Dr. Leidy, in the chair.

Twenty persons present.

A Phosphorescent Variety of Limestone,—Professor Lewis gave a description of a remarkable substance found in one of the mountain mines of Utah, near Salt Lake City, sent to him some months ago by Professor Cope. It is a white rock which phosphoresces with a lurid red light whenever struck or scratched with a hard substance, and on that account has been called by

the miners, Hell-fire rock.

It proves upon examination to be an almost perfectly pure carbonate of lime, containing occasionally slight impurities of iron, etc. It is a loose grained, white, crystalline limestone, the grains of which are but slightly coherent, giving the rock the appearance of a soft sandstone. Upon slight abrasion in the hand, it crumbles to form a coarse, calcareous sand. Under the microscope the rock appears as a loose mass of irregular, angular grains, which are nearly transparent, and which have a lustre resembling that of alum. Portions of the rock are colored slightly yellow by oxide of iron.

Its phosphorescent properties are very remarkable, entitling it to rank as a new variety of limestone. It was long ago noticed by Becquerel that some limestones were slightly phosphorescent after heating or insolation, but so far as known, no other limestone possesses this property in a degree at all approaching that